

Appendix A: EHE Forest Plan Amendment Darby Lumber Lands

Implementation of Alternative B Final Proposed Action in the Darby Lands project requires a site specific forest plan amendment to the Bitterroot Forest Plan (1987) (Darby Lumber Lands EA Sec. 1.7.3, 3.5.7, 3.5.8). The amendment modifies the following Forest Plan standards specifically as they relate to the Darby Lumber Lands Project.

Elk Habitat Effectiveness Standards

The need for this amendment to meet the purpose and need of the Darby Lumber Lands project was disclosed in the EA (January, 2015). This Appendix contains information that complements the elk habitat effectiveness analyses in the EA.

Forest Service Manual (FSM) 1926.51 provides direction for determining what constitutes a “significant amendment” under NFMA. Based on this guidance, this site-specific forest plan amendment is not significant because it will not, individually or cumulatively, significantly alter the long-term relationship between levels of multiple-use goods and services originally projected in the Forest Plan. Also, the amendment will not have an important effect on the entire land management plan, or affect land and resources throughout a large portion of the planning area during the planning period. The amendment modifies standards and guidelines, specific to the Darby Lumber Lands project area. Therefore, this is not a long-term change in the Bitterroot Forest Plan. The public has been notified of this amendment during the NEPA process.

The amendment analysis is organized to:

- Describe the amendment element
- Explain the purpose and the need for the amendment
- Describe the direct, indirect and cumulative effects of the amendment
- Apply the Forest Service Manual criteria for assessing whether or not the amendment is significant
- Display the conclusion on significance or non-significance.

Elk Habitat Effectiveness (EHE)

Elk Habitat Effectiveness Site-Specific Amendment

The Bitterroot Forest Plan includes the following Forest-wide resource standard relevant to elk habitat effectiveness and the Darby Lumber Lands project:

The Forest Plan standard for elk habitat effectiveness (EHE) states, “Manage roads through the Travel Plan process to attain or maintain 50 percent or higher elk habitat effectiveness (Lyon 1983) in currently roaded third order drainages. Maintain 60 percent or higher elk habitat effectiveness in drainages where less than 25 percent of the roads have been built.” In seven third order drainages of the project area, EHE is not meeting Forest Plan standards.

Existing Elk Habitat Effectiveness in Seven 3rd Order Drainages that do not currently meet the EHE standard in the Darby Lumber Lands Area

<u>3rd Order Drainage</u>	<u>Drainage Name</u>	<u>Existing EHE (%)</u>	<u>Plan Standard</u>
04f259-1	Rye Cr. Poke Trib.	35.5	50
04f259-2	Rye Cr. Headwaters	44	50
04f262-1	N. Fk. Rye Headwaters	21.5	60
04f263-1	Cathouse Cr.	38	60
04f263-2	Fox Cr.	44.5	50
04f264-2	Middle Rye Cr.	32	50
04f265-2	Rye Cr. Bear Gulch	48	50

Proposed Standard

The elk habitat effectiveness (EHE) standard that would only apply to the Darby Lumber Lands project would be:

- “All roaded 3rd order drainages in the Darby Lumber Lands analysis area will attain or maintain 50 percent or higher elk habitat effectiveness (Lyon 1983) except in the seven drainages explained below. Elk habitat effectiveness will be maintained or improved in the six 3rd order drainages as shown below:”

Proposed Elk Habitat Effectiveness in five 3rd Order Drainages in the Darby Lumber Lands Analysis Area

<u>3rd Order Drainage</u>	<u>Drainage Name</u>	<u>Elk Habitat Effectiveness (%)</u>
04f259-1	Rye Cr. Poke Trib (part)	43
04f262-1	NF Rye Headwaters (part)	30.5
04f263-1	Cathouse Cr.	44.5
04f263-2	Fox Cr.	46.5
04f264-2	Middle Rye Cr. (part)	40
04f265-2	Rye Cr. Bear Gulch (part)	48

The 3rd order drainage 04f259-2 (Rye Cr. Headwaters) will be brought into compliance with Alternative B FPA, therefore it is not included in the proposed new standard.

Purpose and Need of EHE Standard Amendment

Amendment Purpose and Need

The standard amendment is intended to acknowledge that EHE standard cannot not be met in six 3rd order drainages in the Darby Lumber Lands Project analysis area. The proposed standard would replace, for this project, the various management area standards in the 1987 Forest Plan (USDA Forest Service 1987). The small size of the 3rd order watersheds in this project area limits the amount of roads that can be present on the ground. In order to meet the standards, the mileage of roads needed to be closed would limit forest management access and conflict with other Forest Plan management objectives to provide roaded, dispersed recreation.

Intent of the Plan

Pertinent Forest Plan Goals (USDA Forest Service 1987, pp. II-3)

- Provide habitat to support viable populations of native and desirable non-native wildlife and fish.
- Design transportation systems and road management programs that are responsive to public concerns and protect resource goals.

Pertinent Forest Plan Objectives (USDA Forest Service 1987, pp. II-5)

- Maintain habitat to support viable populations of wildlife species.
- Cooperate with the State of and Montana to maintain the current level of big-game hunting opportunities.

Discussion

This site-specific amendment recognizes that the EHE standard is not currently being met in seven 3rd order drainages in the Darby Lumber Lands analysis area. The roads proposed for storage or decommissioning in these third order drainages improves EHE in 04f259-1, 04f262-1, 04f263-1, 04f263-2 and 04f264-2 and stays the same as current condition in 04f265-2. Table B-1 displays the amount of road closure needed to meet the EHE standard (PF-WILD-039).

Table B-1. Amount of Road Closure needed by Third Order drainage to meet EHE standard

3rd Order Drainage	Drainage Name	Miles of Road Closure needed to meet Forest Plan EHE Standard*
04f259-1	Rye Cr. Poke Trib.	8.35
04f259-2	Rye Cr. Headwaters	4.13
04f262-1	N. Fk. Rye Headwaters	20.75
04f263-1	Cathouse Cr.	12.98
04f263-2	Fox Cr.	1.98
04f264-2	Middle Rye Cr.	9.08
04f265-2	Rye Cr. Bear Gulch	0.93

*All numbers are approximate

Based on the Roads Analysis (PF-TRANS-001) that was done by the Darby Lumber Lands ID team, it was determined that in order to meet the goals and objectives of the Bitterroot Forest Plan within the Darby Lumber Lands Phase I Project area, the proposed plan amendment was necessary. Please see the Wildlife Section 3.5 of EA for a more detailed discussion on EHE.

Effects of Darby Lumber Lands EHE Amendment

Direct and Indirect Effects

Alternative B FPA would result in seven of the 13 third order drainages in the project area meeting the EHE standard. Implementation would improve the EHE in five of the third order drainages that do not currently meet the EHE standard. However, the improvement is not enough to comply with the current standard. It would also improve the EHE in two of the seven third order drainages that currently meet the standard by a small amount. It would improve EHE in five drainages that do not currently meet the standard but not enough to bring them into compliance with the standard. It would slightly reduce EHE in one drainage however that drainage would still meet the EHE standard. It would not change the existing EHE in three drainages, two of which currently meet the standard.

Six drainages would move towards meeting the Forest Plan standard and one will move into compliance. About 0.6 miles of permanent roads will be created or opened under Alternative B Final Proposed Action, but both of the drainages these new roads are located in would meet the EHE standard, and Forest Plan Goals and Objectives will still be met. An elk security analysis (Hillis et al. 1991) is included in our environmental analysis (EA Sec. 3.5.7) that has proven to be a better tool than elk habitat effectiveness analysis for achieving the Forest Plan objective to maintain elk populations and hunting season opportunities in cooperation with Montana Fish, Wildlife and Parks.

Cumulative Effects

The EHE requirements and levels for the Three Saddle project are discussed in Wildlife Section in the EA. The understanding of the role EHE played in elk security has changed over the years and is now not thought to be the most important factor in providing effective elk habitat. Since the establishment of the Forest Plan in 1987, six other similar site-specific amendments of the EHE standard have been made:

Year	Number of 3rd Order Drainages	Environmental Document	Ranger District
1997	2	Camp Reimel EA	Sula
2001	3	Burned Area Recovery EIS	Darby, Sula, West Fork
2002	5	Slate Hughes Watershed Restoration & Travel Management	West Fork
2008	5	Trapper-Bunkhouse EIS	Darby
2008	2	Haacke Claremont EA	Stevensville
2010	5	Lower West Fork EIS	West Fork
2011	5	Three Saddle	Stevensville

The cumulative effect of amending the EHE standard in the Darby Lumber Lands Phase I analysis area in addition to these previous EHE amendments would be imperceptible at the Forest scale. Many of the 3rd order drainages are within 10 percent of the EHE standard and the Bitterroot Valley elk population is stable. Elk security in Darby Lumber Lands project area is well below the recommended levels (Section 3.5.7A in the EA). This is due to open road and trail densities in some areas, combined with a lack of cover throughout most of the area. The lack of cover within the DLL project boundary is a result of previous regeneration harvest on both BNF and former Darby Lumber Company lands combined with high severity fire that occurred during 2000. The Bitterroot Forest Plan objective and goals would continue to be met.

None of the ongoing or reasonably foreseeable future projects on the Forest would further reduce EHE in any of the third order drainages within the DLL analysis area. We have added an elk security analysis (Hillis et al. 1991) to our environmental analysis protocol that has proven to be a better tool than elk habitat effectiveness analysis for achieving the Forest Plan objective to maintain elk populations and hunting season opportunities in cooperation with Montana Fish, Wildlife and Parks. In summary, the proposed actions, in combination with past and reasonably foreseeable future actions in this analysis area, are not expected to cumulatively degrade the habitat effectiveness for elk.

Cumulatively, by implementing this site-specific standard for elk habitat effectiveness, the Darby Lumber Lands project area is expected to have appropriate levels of secure habitat for elk, over time, fully supporting the Forest goals and objectives.

There is no perceptible cumulative effect of this modification, in conjunction with the site-specific thermal cover and coarse woody debris modifications to the Forest Plan proposed in this project.

Application OF FSM 1926.51 “Not Significant” Criteria

Our determination of whether this amendment is significant was done using the process in FSM 1926.51. The handbook states that changes to the land management plan that **are not significant** can result from four specific situations. This site-specific amendment is compared to those situations below:

Changes to the Land Management Plan That are Not Significant	Elk Habitat Effectiveness Standard Amendment
1. Actions that do not significantly alter the multiple-use goals and objectives for long-term land and resource management.	The elk habitat effectiveness amendment does not alter the multiple-use goals and objectives for long-term land and resource management. The amendment affects a small area of the Bitterroot National Forest (about 2.3 percent). This short-term, site-specific project amendment will have no effect on Forest Plan objectives or outputs.
2. Adjustments of management area boundaries or management prescriptions resulting from further on-site analysis when the adjustments do not cause significant changes in the multiple-use goals and objectives for long-term land and resource management.	The elk habitat effectiveness amendment does not adjust management area boundaries.
3. Minor changes in standards and guidelines.	The elk habitat effectiveness amendment is a minor change to management area standards based on more recent science.
4. Opportunities for additional projects or activities that will contribute to achievement of the management prescription.	The elk habitat effectiveness amendment allows access to forest areas that are needed for management requirements.

Conclusion -- Significance/Non-Significance

Based on consideration of the four factors identified in FSM 1926.51, and considering the Forest Plan in its entirety, the adoption of the elk habitat effectiveness amendment to the Bitterroot National Forest Plan is not significant. This amendment is fully consistent with, but further refines and clarifies the means to achieve, current Forest Plan goals and objectives.